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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,944	07/21/2003	Stephen F. Linder	A1748-US-NP	6484

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EXAMINER

BURLESON, MICHAEL L

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/623,944

Applicant(s)

LINDER ET AL.

Examiner

Michael Burleson

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 07/21/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) was submitted on 07/21/2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

1. Claims 6 and 14 are objected to because of the following informalities: "maintain the a predetermined tone" should read – maintain a predetermined tone --. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dattilo US 5293258 in view of Mestha US 6157469.
3. Regarding claim 1, Dattilo teaches of a scanner for scanning a document to generate scanned image data representative of the document, the scanned image data

providing a color representation of the document (column 4, lines 6-16). Dattilo teaches of an output device for generating an output document in response to print ready data (column 4, lines 52-57).

4. Dattilo fails to teach of an image processing system receiving the said scanned image data and generating the print ready data, the image processing system device further comprising: a calibration target comprising a set of digital signals representing a plurality of color test patches, a calibration conversion processor for converting the scanned image data into a set of device independent color signals, a calibration processor for computing a set of color shift correction signals by comparing the device independent color signals representative of a printed version of said calibration target with the stored representation thereof and an adjustment processor operating to adjust a characteristic of the print ready data in response to said color shift correction signals.

5. Mestha teaches of an image processing system receiving the said scanned image data and generating the print ready the image processing system device further comprising: a calibration target comprising a set of digital signals representing a plurality of color test patches (column 5, lines 23-37). Mestha teaches a calibration conversion processor for converting the scanned image data into a set of device independent color signals (column 4, lines 40-45). Mestha teaches of a calibration processor for computing a set of color shift correction signals by comparing the device independent color signals representative of a printed version of said calibration target with the stored representation thereof (column 6, lines 8-14 and 23-34). Mestha teaches of an

Art Unit: 2625

adjustment processor operating to adjust a characteristic of the print ready data in response to said color shift correction signals (column 6, lines 23-34).

6. Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Dattilo wherein Dattilo's device is applied to an image processing system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Dattilo by the teaching of Mestha in order to control an output color by correcting for color drift as stated in column 1, lines 16-19.

7. Regarding claim 2, Mestha teaches wherein the conversion processor uses a 3 dimensional lookup table (column 7, lines 50-54).

8. Regarding claim 3, Mestha teaches wherein the characteristic of the print ready data that is adjusted is the tone reproduction compensation curve (column 5, lines 53-55).

9. Regarding claim 4, Mestha teaches wherein the characteristic of the print ready data that is adjusted is the halftone dot (column 5, lines 53-55).

10. Regarding claim 5, Mestha teaches wherein the characteristic of the print ready data that is adjusted is done in such a way as to maintain the overall gray balance of the output device (column 2, lines 9-11 and column 5, lines 51-55; since inaccuracies in the TRC linearization leads to inaccuracies in gray balancing, UCR/GCR and the TRC linearization (306) is used to maintain the overall gray balance of the marking device).

11. Regarding claim 6, Mestha teaches wherein the characteristic of the print ready data that is adjusted is done in such a way as to maintain the a predetermined tone reproduction curve (column 5, lines 51-55).

12. Regarding claim 7, Mestha teaches wherein the calibration target has a plurality of patches that are neutral or near neutral in color (column 5, lines 32-37).

13. Regarding claim 8, Dittalo teaches that the scanner may be separate from the other elements and connected thereto by a network (figure 1).

14. Regarding claim 9, Mestha teaches of a method of maintaining the reproduction properties of a color reprographic device comprising: causing the device to print a copy of a stored test pattern containing a plurality of colored patches (column 5, lines 23-29).

15. Mestha fails to teach of scanning the printed target with a scanner to obtain a first set of color signals; processing said first set of color signals to obtain average values for the color of each patch in the test target; further processing said average values using a color conversion processor to obtain device independent color values for each patch in the test target, comparing the device independent color values to a stored set of standard values; and from the comparison between the measured and the standard values deriving a correction that can be applied to the output means of the color reprographic device to restore it to a standard condition.

16. Dittalo teaches of scanning the printed target with a scanner to obtain a first set of color signals; processing said first set of color signals to obtain average values for the color of each patch in the test target (column 3, lines 32-35); further processing said average values using a color conversion processor to obtain device independent color

values for each patch in the test target (column 4, lines 37-45), comparing the device independent color values to a stored set of standard values; and from the comparison between the measured and the standard values deriving a correction that can be applied to the output means of the color reprographic device to restore it to a standard condition (column 5, lines 23-36).

17. Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Mestha wherein Mestha's device is applied to a scanner. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Mestha by the teaching of Dittalo in order to reproduce a color picture that is a true representation of the original picture as stated in column 1, lines 14-16.

18. Regarding claim 10, Mestha teaches wherein the conversion processor uses a 3 dimensional lookup table (column 7, lines 50-54).

19. Regarding claim 11, Mestha teaches wherein the correction that is applied to the output means is a tone reproduction compensation curve (column 5, lines 53-55).

20. Regarding claim 12, Mestha teaches wherein the correction that is applied to the output mean is a modification to its halftone dot (column 5, lines 53-55).

21. Regarding claim 13, Mestha teaches wherein the characteristic of the print ready data that is adjusted is done in such a way as to maintain the overall gray balance of the output device (column 2, lines 9-11 and column 5, lines 51-55; since inaccuracies in the TRC linearization leads to inaccuracies in gray balancing, UCR/GCR and the TRC linearization (306) is used to maintain the overall gray balance of the marking device).

Art Unit: 2625

22. Regarding claim 14, Mestha teaches wherein the correction that is applied to the output means is done in such a way as to maintain the a predetermined tone reproduction curve (column 5, lines 51-55).
23. Regarding claim 8, Dittalo teaches that the scanner may be separate from the other elements and connected thereto by a network (figure 1).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Burleson whose telephone number is 571-272-7460. The examiner can normally be reached Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twlyer Lamb can be reached on 571-272-7404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/623,944

Page 8

Art Unit: 2625

K Williams

Michael Burleson

Patent Examiner

MB

May 25, 2007

KIMBERLY WILLIAMS
PRIMARY PATENT EXAMINER